



THREE PHASE STRING INVERTER 40-60 kW

CSI-40K-T4001A-E | CSI-50K-T4001A-E | CSI-60K-T4001A-E

CSI Solar's grid-tied, transformer-less string inverters help accelerate the use of three-phase string architecture for commercial and industrial rooftop applications. CSI inverters are easy to configure and have a high conversion efficiency of 98.7% to provide high yield and significant BoS savings. With a wide operating range of 200-1000 VDC and multiple MPPTs, they are the ideal choice for maximum energy harvesting.



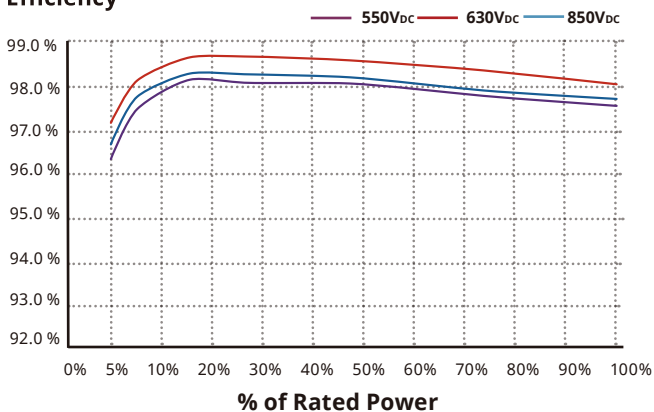
Warranty, extension up to 20 years

KEY FEATURES

- Maximum efficiency of 98.7%
Maximum EU efficiency of 98.3%
- Multiple MPPTs design for complex application scenarios
- 32A MPPTs support multiple high-power modules
- Integrated DC switch
- Smart string monitoring
- Supports aluminum cable
- Integrated AFCI function
- DC reverse polarity protection

EFFICIENCY CURVE

CSI-60K-T4001A-E
Efficiency



HIGH RELIABILITY

- Intelligent cooling technology
- SPD Type II for DC and AC
- Residual current monitoring

BROAD ADAPTABILITY

- IP66 protection for harsh environments
- Utility interactive controls: Active power derating, reactive power control, and over frequency derating
- Wide MPPT range for flexible string sizing

SYSTEM/TECHNICAL DATA

MODEL NAME	CSI-40K-T4001A-E	CSI-50K-T4001A-E	CSI-60K-T4001A-E
Product number	74002599	74002600	74002601
INPUT (DC)			
Max. Input Voltage		1100 V _{DC}	
Start-up DC Input Voltage		195 V _{DC}	
Rated Input Voltage		600 V _{DC}	
MPPT Voltage Range		200 - 1000 V _{DC}	
MPPT No.	3	4	5
Max. String Input No.	6	8	10
Max. Input Current per String ¹	20 A _{DC}	20 A _{DC}	20 A _{DC}
Max. Input Current per MPPT	32 A _{DC}	32 A _{DC}	32 A _{DC}
Max. DC Short-circuit Current per MPPT	40 A _{DC}	40 A _{DC}	40 A _{DC}
OUTPUT (AC)			
Rated AC Output Power	40 kW	50 kW	60 kW
Max. AC Output Power (Apparent)	40 kVA	50 kVA	60 kVA
Rated Output Voltage		380 / 400 V _{AC}	
Grid Connection Type		3 L / N / PE	
Max. Output Current	60.8 A	76 A	91.2 A
Rated Output Frequency		50 / 60 Hz	
THDi		< 3 %	
Power Factor		0.8 leading ... 0.8 lagging	
Zero Export Solution		optional, Smart Meter or Smart Power Control Box needed	
EFFICIENCY			
Max. Efficiency		98.7 %	
EU Efficiency		98.3 %	
ENVIRONMENT			
Protection Degree		IP66	
Cooling		Intelligent Air Cooling	
Operating Temperature Range		-30 °C to +60 °C	
Operating Humidity		0 -100 % (non-condensing)	
Operating Altitude		4000 m (>3000 m derating)	
PROTECTION			
DC Switch		Yes	
Anti-Islanding Protection		Yes	
DC Reverse-Polarity Protection		Yes	
DC Insulation Resistance Detection		Yes	
Residual Current Monitoring		Yes	
String Monitoring		Yes	
AC Output Over Current Protection		Yes	
AC Short Circuit Protection		Yes	
Grid Monitoring		Yes	
AFCI		Yes	
Oversvoltage Category		II (DC), III (AC)	
DC/AC SPD		DC SPD Type II / AC SPD Type II	
DISPLAY AND COMMUNICATION			
Display		LED Indicators & APP	
Communication		2 × RS485 / WiFi	
MECHANICAL DATA			
Dimensions (W / H / D)		720 x 555 x 288 mm	
Weight	48 kg	50 kg	51 kg
DC Input terminals		MC4(Staubli)	
AC Input terminals		OT Terminals	
CERTIFICATION			
Safety / EMC		IEC62109, IEC61000-6-1/2/3/4	
Grid Connection Standards		IEC61727 & IEC62116, EN50549-1, EN50549-2, CEI0-21, NRS097, VDE4105, VDE4110 RD647, RD1699, RD661, RD413, UNE 217002, UNE 217001, RD 244, NTS2.1, PPDS, NC RFG	

¹: Single string per MPPT configuration

The specifications and features contained in this datasheet may deviate slightly from the actual product due to on-going innovation and product enhancement. CSI SOLAR CO., LTD reserves the right to make necessary adjustment to the information described herein at any time without further notice.

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Caution: For professional use only. The installation and handling of PV equipment requires professional skills and should only be performed by qualified persons. Please read the safety and installation instructions before using the product.